To: McKean, Deborah[mckean.deborah@epa.gov]; Rauscher, Jon[Rauscher.Jon@epa.gov]
Cc: Charters, David[Charters.DavidW@epa.gov]
From: Charters, David
Sent: Sat 8/15/2015 5:33:04 PM
Subject: FW: Water Treatment at Gold King
cement creek CC48 N Silverton .xlsx

Sorry I did not follow who I should send it to beyond you Jon

From: Kady, Thomas
Sent: Thursday, August 13, 2015 1:03 PM
To: jonathan.d.mcburney@lmco.com; christopher.d.gussman@lmco.com; Sprenger, Mark; Charters, David; Henry, Richard (US FWS)
Cc: richard.m.leuser@lmco.com; Taylor, Kevin C; Burchette, Sella; Greenberg, Marc
Subject: FW: Water Treatment at Gold King
Importance: High

Jon –

R8 called for help with the Gold King incident. We need to look for small footprint treatment units that can be mounted on semis. Flow is 200 – 800 gpm. Average ~500 gpm. pH is running at 2-4 from the adit, but 6-7 in the creek. They have room for settling basins, equilibration/holding ponds, and whatnot. Need to raise pH to knockout the metals. Maybe aeration as well. What we're really looking for is a company that has the equipment, capability and experience to get up there and do their thing. We need to ID prospective vendors and vet their approach/processes. (Charge the 001 Emergency Response Work Assignment)

Attached is analytical results **taken in the creek** (not the adit discharge) just downstream of the adit shortly after the release … so it should be a worst case. Need to knock out the Zinc and Copper from a toxicity point of view, but iron loading will make that more difficult.

MARK SPRENGER, DAVE CHARTERS, CHRIS GUSSMAN, RICH HENRY, MARC GREENBERG – am I right about zinc and copper being the bad actors for aquatic life? Are there other metals in the spreadsheet we need to focus on?

Tom

From: Brobst, Bob
Sent: Thursday, August 13, 2015 12:31 PM
To: Kady, Thomas
Subject: FW: Water Treatment at Gold King

Robert B. Brobst, P.E.

Senior Environmental Engineer

U.S. E.P.A. Region 8

1595 Wynkoop Street

Denver Colorado

303-312-6129 (office)

"It is a capital mistake to theorize before one has data. Insensible one begins to twist facts to suit theories, instead of theories to suit facts." Arthur Conan Doyle's A Scandal in Bohemia (1891)

" The Good thing about science is that it's true whether or not you believe in it." Neil deGrasse Tyson

From: Brobst, Bob
Sent: Tuesday, August 11, 2015 11:46 AM
To: 'Matt Francis'; Way, Steven; Griswold, Hays
Subject: RE: Water Treatment at Gold King

Matt wanted to get some prelim data on WQ at the audit – but it is taking a while to get to that data base. Marty is on it though so I hope to have it soon.

In the meantime here is some chemical data downstream in cement ck. Just upstream from Silverton at station CC48.

I will send the Adit data along as soon as I get it.

Bob

Robert B. Brobst, P.E.

Senior Environmental Engineer

U.S. E.P.A. Region 8

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deGrasse Tyson

From: Matt Francis [mailto:m.francis@erllc.com]
Sent: Tuesday, August 11, 2015 10:10 AM
To: Brobst, Bob; Way, Steven; Griswold, Hays
Subject: Water Treatment at Gold King

These are the guys talking to us so far

http://www.omniwatersolutions.com/

http://www.evoqua.com

Matt Francis

Environmental Restoration, LLC

303.994.6611

in, or transmitted with, this e-mail. If you have received this e-mail in error, please immediately notify by return e-mail. Thank you.